

Atty. Dkt. No. 039153-0306 (F0793)

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons which follow.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, are presented, with an appropriate defined status identifier.

Claims 7-14 and 21-32 stand finally rejected. After amending the claims as set forth above, claims 7-14 and 21-32 remain pending in this application. The specification has been amended to correct a typographical error which is on page 8.

Claims 7, 21 and 27 have been amended for clarity to more expressly provide the features argued in the previous response filed February 18, 2003. In particular, Applicants have added language with respect to selecting a component and generating the control signal in response to image data associated with the component. This language relates to the embodiment described on pages 7 and 8 of the present application. The present application states:

System 10 can provide ASIC-type functionality by selecting parts from database 34, media storage unit 38, or database 42 in accordance with a program to provide images on wafer 12. For example, a software program selecting transistors, diodes and their interconnections can be executed by computer 32 to cause mask 20 to provide the appropriate structures on wafer 12.

Individual images for the individual parts can be stored in database 34, media storage unit 38 or database 42. In this way, computer 32 only operates a minimal software program describing integrated circuit (IC). Images for individual components are retrieved from unit 38 or database 42 when needed.

See present application, page 7, line 28 -- page 8, line 8. No new matter is added in the amendments to the claims.

Atty. Dkt. No. 039153-0306 (F0793)

In paragraphs 1 and 2 of the Office Action, claims 7-14 and 21-31 are rejected under 35 U.S.C. § 103(e) as being anticipated by U.S. Patent No. 6,097,361 (Rohner). The Examiner states:

Rohner, in col 1, lines 8-12, in col 3, lines 43-63, and in col 4, lines 1-67, and in col 5, lines 1-7, in col 6, lines 60-63, in col 7, lines 18-34, and in col 12, lines 45-47, discloses a method of manufacturing an integrated circuit comprising providing a pattern of radiation via an LCD assembly and a (reduction lens system (reference 26) (means for focusing the light on the wafer) and performing a semiconductor fabrication process with a pattern of radiation, and providing a second pattern of radiation via the LCD panel to perform a second semiconductor fabrication with the second pattern of radiation, and discloses that the LCD assembly is coupled to a computer system via display driver, control unit, and memory unit. Rohner, in col 7, lines 17-34, discloses that the memory unit stores data necessary to display a desired pattern upon the LCD panel (means for providing a [pattern of light], wherein the control unit is adapted to a computer system in order to display data from the computer system (means for controlling the means for providing, and selecting the pattern) and configured to store the data (database) within the memory unit in order to forward the display data (from a workstation executing a software program) via the display driver that produces multiple display signals to the LCD panel (claims 7-8, 14, 21, 23 and 25-28). Rohner, in col 4, lines 9-40, in col 6, lines 25-41, discloses that a step-and repeat process is performed to produce the pattern on the light sensitive layer on the substrate (claim 9). Rohner, in col 1, lines 1-20, discloses that the integrated circuits are produced by patterning layers in succession to form features (metal lines) (interconnects) that comprise elements of an integrated circuit (application specific IC) (claims 10, 13, 22 and 24). Rohner, in col 10, lines 38-67, and in col 11, lines 1-10, discloses that the pattern structure is that of a MOS transistor (claim 11). Rohner, in col 3, lines 61-67, and in col 4, lines 1-8, and lines 21-25, discloses that the pattern is stored electronically (memory unit configures the LCD display data) (claim 12). Rohner, in col 10, lines 38-62, and in figure 6a, discloses that the image data includes application specific IC information, such as two-dimensional matrix transparent pixel electrodes, and corresponding electrical switching elements as in MOS

Atty. Dkt. No. 039153-0306 (F0793)

transistors (claims 29, and 31). Rohner, in col 7, lines 22-23, and lines 49-65, discloses that the image data is stored in the memory unit, and that the memory unit comprises DRAM devices, and alternatively programmable read-only memory devices (storage media) (claim 30).

Applicants respectfully traverse the rejection.

Each of the independent claims 7, 21 and 27 includes limitations related to the formation of the control signal by selecting components and using image data associated with the components to generate the control signal. Such a configuration provides significant advantages such as ASIC-type functionality and requiring a minimal software program to describe the IC. See present application, page 7, line 28- page 8, line 2. Further, such a program allows updates to IC designs to be more easily made. The present application states:

Database 34, media storage unit 38 and database 42 can be updated periodically to provide structures for particular processes, technologies, new structures, etc. In this way, updates to not require reformation of masks or revisions of the program executed by computer 12 to generate the image on mask 20.

See present application, page 8, lines 17-21. Therefore, the recited methods provide significant advantages related to software efficiency.

The recited methods in claims 7, 21 and 27 are not shown, described or suggested in Rohner. Rohner does not disclose or suggest a method of using a database of images and selecting a component to obtain images associated with the component. Rohner is silent as to how the control signal is generated. Indeed, individual component images, ASIC functionality, software efficiency, and updates of database for new technologies and new structures are not even mentioned. Therefore, Rohner does not teach every element of claim 7-12 and 21-32 as recited by 35 U.S.C. § 102(e). Accordingly, Applicants respectfully submit that claim 7 and its dependent claims 8-12, claim 21 and its dependent claims 22-26 and claim 27 and its dependent claims 28-31 are patentable over the cited art.

Atty. Dkt. No. 039153-0306 (F0793)

In paragraphs 3-4 of the Office Action, claim 32 is rejected under by 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,097,361 (Rohner) in view of European Patent No. 0315589 (Ciba-Geigy). The Examiner states:

The difference between the claim and Rohner is that Rohner does not disclose that the control signal is a video signal.

Ciba-Geigy, in col 4, lines 47-65, discloses that image signal (control signal) is retrieved from a video output.

Therefore, it would be obvious to use video output devices as the control signal as taught by Ciba-Geigy because Rohner does not limit the display signal to a particular type, and Ciba-Geigy, in col 5, lines 64-65, and in col 6, lines 1-8, discloses that using a video signal enables the operator to view a real-time image of the altered slide image.

Applicants respectfully traverse the rejection.

Ciba-Geigy does not provide for the deficiencies of Rohner. Accordingly, it is respectfully submitted that claim 32 is patentable for the same reasons discussed above.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1447. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 06-1447.

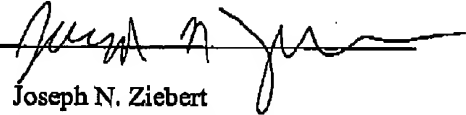
Atty. Dkt. No. 039153-0306 (F0793)

Respectfully submitted,

Date

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